

#10

12-30-03

IA00010  
patent application

**IN THE UNITED STATES  
PATENT AND TRADEMARK OFFICE**

Applicant(s): Donald Remboski  
Juergen Reinold

Atty Docket No. IA00010

Serial No.: 09/943,921

Group Art Unit: 2664

Filed: 08/31/2001

Examiner: A. G. Patel

TITLE: VEHICLE ACTIVE NETWORK WITH BACKBONE STRUCTURE

**Certificate of Transmission under 37 CFR 1.8**

I hereby certify that this correspondence is being facsimile transmitted to Mail Stop NON-FEE  
AMENDMENT, Commissioner for Patents, Box 1450, Arlington, VA 22202.

On November 21, 2003

Signature

V. Lynn Webb

Printed Name of Person Signing Certificate

**AFFIDAVIT  
PURSUANT TO 37 C.F.R. §1.132**

Assistant Commissioner of Patents  
Washington, D.C. 20231

Dear Assistant Commissioner:

STATE OF ILLINOIS )

COUNTY OF COOK )

I, Juergen Reinold, being duly sworn, depose and say as follows:

1

of 5

IA00010  
patent application

I received a Vordiplom in Informatik (analogous to Bachelor of Science Degree in Computer Science) from the Rheinisch-Westfälische Technische Hochschule (RWTH) Aachen in Germany in 1985 and the Informatik Diplom (analogous to Master of Science Degree in Computer Science) the Rheinisch-Westfälische Technische Hochschule (RWTH) Aachen in Germany in 1989.

I have been employed by Motorola, Inc. since 1989 where I have served in various management and technical capacities. I spent most of my technical work at the Motorola Computer Group, both in Düsseldorf/Germany and in Tempe/Arizona. I have developed system software, performed system and performance analysis on complex computing and communication systems, and created the architecture for the StarMax Pro 6000 desktop computer, "The Fastest Personal Computer On Earth" according to MacWeek Magazine in August 1997. I led a team of engineers as the Chief Architect on a development effort in Motorola geared towards the next generation systems architecture for automotive electronic systems. I have published several papers and given key note speeches on computer system performance and architecture issues. Additionally, I have inventively contributed to more than thirty filed or issued US patents for Motorola.

I, Juergen Reinold, am an inventor of the above referenced patent application and have reviewed European Patent Application EP0884873 (hereinafter Civanlar et al.) and Patent Cooperation Treaty (PCT) Publication Number WO 00/77620 (hereinafter Razavi et al.) and state the following:

The present invention teaches a vehicle comprising an active network. Neither Civanlar et al. nor Razavi et al. discloses or suggests a vehicle comprising an active network. Moreover, even if the subject matter of Civanlar et al. were combined with that of Razavi et al., this would not lead anyone to develop the invention. For example, Civanlar et al. in combination with Razavi et al. does not teach all of the claimed features namely, a vehicle comprising an active network. See, for example, independent claims 1 and 12 of the application.

As is known in the art, traditional data networks (passive networks) passively transport messages from one end node to another. Such passive networks are only aware of the destination of messages passing through the nodes and are specifically designed to

IA00010  
patent application

deliver exactly one unmodified copy of the message to its ultimate destination. The passive network is insensitive to the messages it carries and the messages are transferred between nodes without modification. This is exclusively the type of network taught in Civanlar et al. and Razavi et al.

As understood by those skilled in the art of computing and networking, an active network is a network in which the nodes can perform custom operations on the contents of the messages that pass through the nodes. An active network does not require a central server or computing resource. Active network nodes are aware of the contents of the messages transported and can participate in the processing and modification of the messages while they travel through the network.

Civanlar et al. teaches internetwork relay system that includes an ingress router that receives a packet from a source network and attaches a label, which is used to forward the packet across the network (page 4, lines 35-45). In other words, Civanlar et al. merely attaches a label to the header of a packet to facilitate the movement of the packet across multiple networks (page 5, lines 23-25). Attaching a label to the header of a packet does not modify the contents of the message in the packet. The multiple networks disclosed in Civanlar et al. are passive networks as they cannot perform custom operations on messages (packets) passing through them. Each network merely passes on the packet according to the instructions present in the packet header's label. In addition, the various networks in Civanlar et al. are not aware of, and cannot participate in the processing or modification of, the contents of messages (packets) passing through them. Consequently, the various networks in the core and edge of the networks disclosed in Civanlar et al. are not active network elements since they do not perform the functions of an active network as understood by those skilled in the art. Therefore, nowhere does Civanlar et al. teach or suggest an active network as understood by those skilled in the art.

Razavi et al. teaches an in-car network that is built around an on-board compute platform where all components of the in-car network are either directly plugged into the compute platform or coupled to it via an Ethernet connection (Figure 2, and page 5, line 38 to page 6, line 2). In addition, Razavi et al. reinforces that all computing for the in-car network goes through a central computing resource by stating that "compute platform 22

IA00010  
patent application

is at the center of in-car sub-network 20." (page 7, line 36). The central compute platform exclusively manages the routing of packets to each end node. Central compute platform is at the center of a passive network. Nodes in Razavi et al. cannot perform custom operations on messages passing through them. In addition nodes in Razavi et al. are not aware of, and cannot participate in the processing or modification of, the contents of messages passing through them. Therefore, nowhere does Razavi et al. teach or suggest an active network as understood by those skilled in the art.

Both Civanlar et al. and Razavi et al. fail to teach a vehicle comprising an active network. Consequently, even if Civanlar et al. were combined with of Razavi et al. or any other reference of record, such a combination would not lead to the practice of the invention. See, for example, independent claims 1 and 12 of the application.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true. I further declare that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful and false statements may jeopardize the validity of the subject patent application or any patent issued thereon.

I further declare that I have received no special compensation or consideration for making this affidavit, nor have I been in any way told, either directly or by implication or inference, by anyone that my employment by Motorola, Inc. or my professional advancement or other matters of personal or professional interest to me depend in any

IA00010  
patent application

way on whether or not I make this affidavit or the content thereof. I further declare that I make this affidavit of my own free will and choice without any duress or influence of any kind, believing fully in the truth of the statements made by myself herein.

  
Juergen Reinold

I, DAWN M HEBEIN, a Notary Public in and for the County and State aforesaid, do hereby certify that Juergen Reinold, whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he signed, sealed and delivered the said instrument as his free and voluntary act and deed for the uses and purposes therein set forth.

Given under my hand and Notary Seal this 20 day of NOVEMBER, 2003.

My commission expires on 9-28-2006

SEAL

